

**ABSTRACT**

The system for providing computer guided ablation of tissue of a patient includes an imaging device, an ablative surgical computer system, and a set of surgical devices. The imaging device receives imaging data from a treatment region of a patient, processes the imaging data and provides imaging output data and imaging signals. The imaging output data is available to an operator. The ablative surgical computer system includes a guidance module for processing the imaging signals and providing a treatment guidance plan to the operator; and, a treatment module for acquiring and processing surgical device output data, for optimally controlling treatment parameters and providing feedback information to the operator based on the treatment guidance plan. The set of surgical devices includes at least one integrated ablative/temperature sensing device including at least one ablative device for providing ablation of the treatment region based on the treatment parameters and operator input; and, at least one temperature sensing device for acquiring temperature data from the treatment region and providing a temperature sensing device output signal. The temperature sensing device output signal is a portion of the surgical device output data. The treatment guidance plan is utilized for placing the integrated ablative/temperature sensing device into the treatment region.